

## A NEW SPECIES OF THE GENUS COMPSOTHRIPS REUTER (THYSANOPTERA, PHLAEOTHIRIPIDAE) FROM CHINA

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**Abstract** The genus *Compsothrips* Reuter is composed of wingless ant mimicking thrips with eight segmented antennae, of which segments IV, V, VI usually bear a ventral apical protrusion. Ocelli are lacking, praepetal plates present, with the pterothorax greatly reduced, and narrower than the prothorax in most species. Wing scales absent, with prolongations of the eyes more ventral than dorsal pelta broadly derby shaped. Since Pelikan (1959) collected one species of *C. sinensis* (Pelikan), no Chinese workers have reported it. In this paper, a new species of *Compsothrips* is described from China. Type specimens are deposited in the collection of the Entomological Museum, Northwest A & F University, China (NWAUFU).

**Key words** Thysanoptera, Phlaeothripidae, *Compsothrips*, new species, China.

The genus *Compsothrips* was erected by Reuter in 1901 with *Phloeothrips albosignata* Reuter as the type species. Up to now, 25 species have been reported in the world (Mound & Palmer, 1983), of which 1 species was recorded from China (Pelikan, 1961), i. e., *C. sinensis* (Pelikan).

In this paper, one new species of the genus is described from China.

*Compsothrips reticulatus* sp. nov. (Figs. 1-9)

Male. Body length 2 750  $\mu\text{m}$ . Antennal segments I and II black, segments III to V yellowish brown; segment VI yellowish brown at base, brown at apex; segments VII to VIII black. All tarsi brown yellowish, all femur and tibia blackish brown. Abdominal segment I chalky white; segments II to VI blackish brown, the rest black. Major setae yellowish brown. All measurements are given in micrometer ( $\mu\text{m}$ ).

Head (Fig. 1) 1.88 times as long as width of eyes and slightly protruding beyond the eyes; cheeks gradually narrowing to base, forming a weak collar there, but sharply constricted basally, and with a few minute bristles. Eyes big and distinctly prolonged ventrally as a subacute process exceeding the inner posterior eye margin by about 1/3 of the eye's dorsal length. Postocular setae very short, yellow, blunt apically, more than 1/4 of dorsal eye length, situated below eyes and 75 apart from the eyes; postocellar and interocellar setae longer than postocular setae, blunt at

apex. Ocelli absent. Antennae (Fig. 9) 8-segmented, segment I truncate, II goblet-shaped, the sides weakly convex, III clavate, apedicellate, outer margin slightly expanded subbasally, IV and V clavate pedicellate, pedicel on IV weak, VI and VII oblong pedicellate, pedicel abruptly formed, VIII lanceolate, pedicel short and abruptly formed; V and VI prolonged on inner apex; segment III with one cone, segments IV to VI each with 2 sense cones; segment VII with 1 cone ventrally near apex; segment III 5 times as long as wide. Length/width ratio of antennal segments: I 2.10, II 5.00, III 4.50, IV 3.55, V 3.50, VI 2.73, VII 2.20, VIII 3.17. Dorsal surface of head hexagonally reticulate at near base, anteriorly with a few weak, transverse, with a few microsetae similar to those on cheeks. Maxillary stylets retracted half way into head capsule and apart from each other medially, V-shaped and low in head. Maxillary bridge absent. Mouth cone short and rounded.

Pronotum (Fig. 5) orbicular, 0.47 times as long as head at middle, 1.38 times as broad (across epimera) as long (median length); anterior, posterior with transverse, lateral with longitudinal striate and median area smooth except for a stronger median longitudinal thickening, epimera sutures completely. Major setae blunt at apex, but posteromarginals reduced, pointed at apex; posteroangulars the longest. Mesonotum (Fig. 3) with rectangular and reticulate lateral. Metanotum elevated medially and with heavy

This project was supported by the National Natural Science Foundation of China (30570205) and the postgraduates' educational innovation program of Northwest A & F University (05ych007).

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Received 28 Apr. 2006; accepted 18 July 2006.

sculptured, the sculpture ending abruptly posteriorly, joined in concentric rings below node. Praepectal plates present, more or less rhomboidal; probasisternum (Fig. 8) well development, and close to each other; spinasternum short and rod-shaped; mesoprasternum shuttle shaped. Prothorax broader than mesonotum, metanotum and pelta. Wings absent. All legs long, slender and with weakly striate except forelegs. Forefemora (Fig. 2) enlarged, foretarsi (Fig. 2) inner armed with notable triangular tooth.

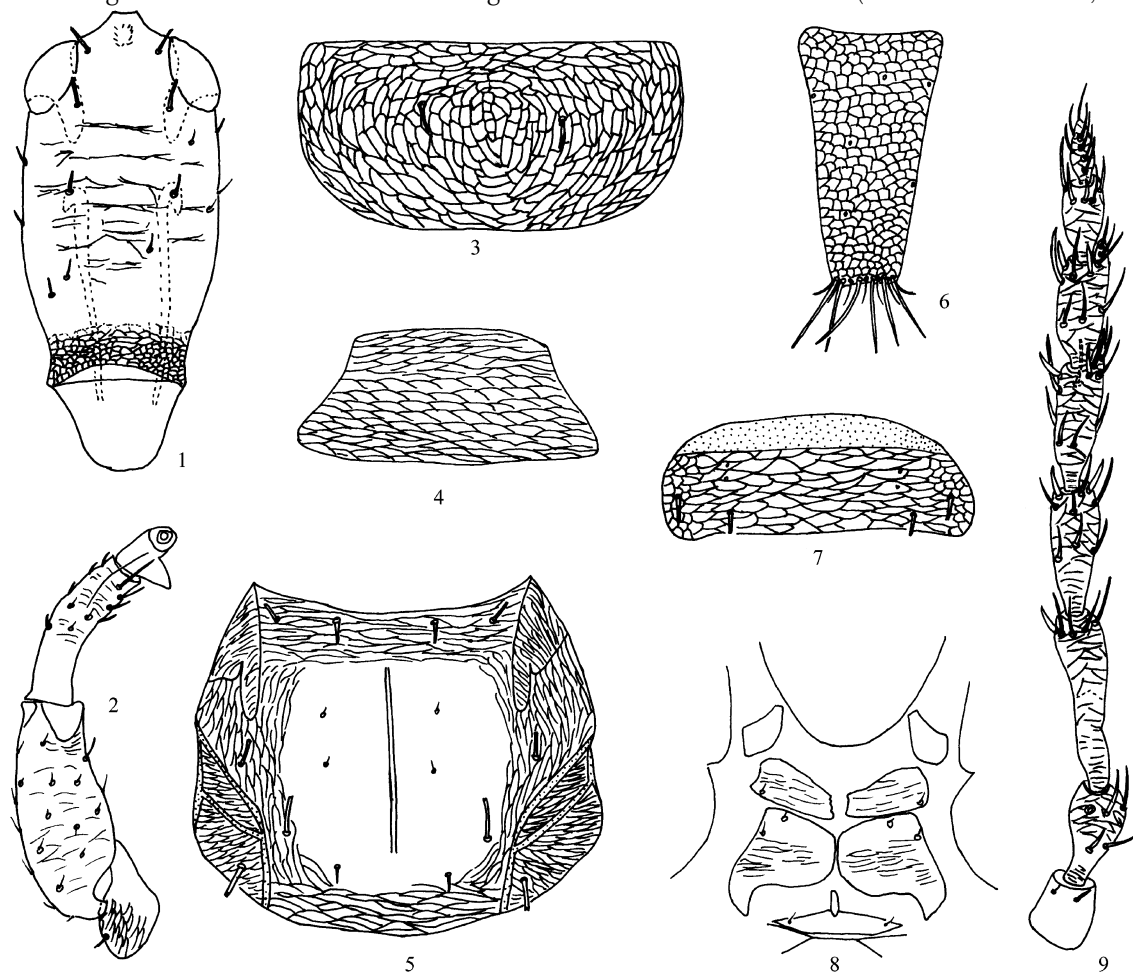
Pelta (Fig. 4) well developed trapezoid, with weakly reticulation, without micropore at near basal margin. Abdominal tergite II to VII with one pair reduced retaining setae and not sigmoid. Tergite II to IX with reticulation; tergite V length 125 at median, width 500, B<sub>1</sub> setae on tergite V length 65, B<sub>2</sub> 40; setae on tergite IX shorter than tube, B<sub>1</sub> length 100, B<sub>2</sub> 90, B<sub>3</sub> 100, apical blunt; anal 62.5-75, all shorter than tube; tube slightly constricted anteriorly, about 0.43 times as long as head and 1.95 times as long as

basal width. Tergite X (tube) (Fig. 6) length 195, width: basal 100, apical 45.

Measurements of holotype male in  $\mu\text{m}$ . Total body length 2 750. Head length 450, from anterior margin of eyes 120, width across eyes 240, across cheeks 230, across cheeks just before basal collar 170; eye dorsal length 90, ventral length 120. Pronotum median length 210, width: anterior 200, postterior 290. Tube length 195, basal width 100, apical width 45. Antennal segments I to VIII length (width) as follows: 52.5 (25); 125 (25); 270 (60); 97.5 (27.5); 87.5 (25); 75 (27.5); 55 (25); 47.5 (15). Length of setae: postocular 25, postocellar 30, interocellar 22.5; prothoracic anteroangular about 10, anteromarginal about 15, mid-lateral 12.5, posteroangular 40, epimeral 20, posteromarginal 7.5; metanotal median setae 25; B<sub>1</sub> on tergite IX 100, B<sub>2</sub> 90, B<sub>3</sub> 100; anal 62.5-75.

Female: unknown.

Holotype ♂ Mt. Xiaowutai Natural Conservation District (39° 40'- 40° 10' N, 114° 50'-



Figs. 1-9. *Comptosia reticulata* sp. nov. 1. Head, dorsal view. 2. Fore leg. 3. Mesonotum. 4. Abdominal pelta I. 5. Pronotum, dorsal view. 6. Tube. 7. Metanotum. 8. Pro-midsternum. 9. Antenna.

115°15'E), Zhuolu County, Hebei Province, 21 Aug. 2005, 1 700 m, habitat: collected by sweeping near a creek, coll. GUO Fu Zhen (NWAUFU). Paratype: 1 ♂, same data as holotype (NWAUFU).

Remarks. This new species is similar to *C. sinensis* (Pelikan), but can be distinguished from the latter by: 1) antennal segment III with 1 cone; 2) postocular setae blunt at apex; 3) antennal segments I and II black, segments III to V yellowish brown; segment VI yellowish brown at base, brown at apex; segments VII to VIII black. In the latter species: 1) antennal segment III with 2 cones; 2) postocular setae dilated and open at apex; 3) antennal uniformly black, segment II at apical margin paler, blackish brown.

Etymology. The specific name is derived from the reticulation of the body surface.

**Acknowledgments** We are grateful to Dr. Mound, L. A. (CSIRO Entomology, Canberra A. C. T., Australia) for sending reprints and reviewing the manuscript.

## 中国多饰管蓟马属一新种 (缨翅目, 管蓟马科)

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**摘要** 多饰管蓟马属是无翅、类似蚂蚁形状的一类蓟马, 触角 8 节, 通常节 IV、V、VI 腹面端部有突出延伸物, 无单眼, 前下胸片存在; 在绝大部分种类中翅胸很弱, 窄于前胸, 并且翅瓣缺; 复眼腹面延伸大于背面, 腹部节 I 盾板帽状。自从 Pelikan 于 1959 年在中国采到一种无翅多饰管蓟马, 中国再无人报道过此属。本文记述中国多饰管蓟马属 1 新种, 即网多饰管蓟马 *Compsothrips reticulatus* sp. nov. 并与无翅多饰管蓟马 *C. sinensis* (Pelikan) 进行了比较。模式标本

**关键词** 缨翅目, 管蓟马科, 多饰管蓟马属, 新种。

中图分类号 Q969.34

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保存于西北农林科技大学 (NWAUFU)。

新种与 *C. sinensis* (Pelikan) 相似, 其主要区别是新种

- 1) 触角节 III 有 1 个感觉锥; 2) 复眼后鬃端部钝, 不膨大; 3) 触角节 I ~ II 黑色, 节 III ~ V 棕黄色, 节 VI 基部棕黄色, 端部棕色, 节 VII ~ VIII 黑色; 而后者, 1) 触角节 III 有 2 个感觉锥; 2) 复眼后鬃端部膨大很宽; 3) 触角全部黑色, 只是节 II 端部边缘灰白色, 黄棕色。